



## COMMONWEALTH of VIRGINIA

### DEPARTMENT OF ENVIRONMENTAL QUALITY

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August 10, 2011

Comments on Mid Atlantic WEA Draft EA  
Program Manager  
Office of Offshore Alternative Energy  
Programs (MS 4090), BOEMRE  
381 Elden Street,  
Herndon, Virginia 20170-4817

RE: Draft Environmental Assessment and Federal Consistency Determination for the Commercial Wind Lease Issuance and Site Characterization Activities on the Atlantic Outer Continental Shelf Offshore New Jersey, Delaware, Maryland, and Virginia, (DEQ 11-130F).

Dear Program Manager:

The Commonwealth of Virginia has completed its review of the July 2011 Draft Environmental Assessment (EA) (received July 14, 2011) for the above referenced project and the July 11, 2011 Federal Consistency Determination (FCD) for the proposed action (received July 12, 2011). The Department of Environmental Quality is responsible for coordinating Virginia's review of federal environmental documents and responding to appropriate federal officials on behalf of the Commonwealth. DEQ is also responsible for coordinating Virginia's review of federal consistency documents submitted pursuant to the Coastal Zone Management Act (CZMA) and providing the state's response. The following agencies participated in the review of this proposal:

Department of Environmental Quality  
Department of Conservation and Recreation  
Department of Game and Inland Fisheries  
Marine Resources Commission  
Department of Mines, Minerals and Energy  
Department of Health  
Department of Historic Resources

The Department of Agriculture and Consumer Services, Virginia Institute of Marine Science, Hampton Roads Planning District Commission, Accomack-Norhampton Planning District Commission, Virginia Coastal Program and Virginia Coastal Energy Research Consortium were also invited to comment on the proposal.

## **PROJECT DESCRIPTION**

The Department of the Interior (DOI) Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has submitted a draft Environmental Assessment (EA) considering the environmental impacts and socioeconomic effects of issuing renewable energy leases, which includes reasonably foreseeable site characterization activities (geophysical, geotechnical, archeological, and biological surveys) on those leases, in identified Wind Energy Areas (WEAs) offshore New Jersey, Delaware, Maryland, and Virginia. In addition, the draft EA considers the reasonably foreseeable environmental impacts and socioeconomic effects associated with the approval of site assessment activities (including the installation and operation of meteorological towers and buoys) on the leases that may be issued. The Virginia WEA under consideration in the EA consists of 22 whole Outer Continental Shelf (OCS) blocks and 4 partial blocks. The western edge of the area is approximately 18 nautical miles (nm) from Virginia Beach, and the eastern edge is approximately 37 nm from Virginia Beach. The entire area is approximately 164 square nautical miles. The EA considers six alternatives (Alternatives A-F). Alternative A (the preferred alternative) is the issuance of commercial and research wind energy leases within the WEAs offshore New Jersey, Delaware, Maryland and Virginia, and approval of site assessment activities on those leaseholds.

## **CONCLUSION**

Provided activities are performed in accordance with the recommendations which follow in the Impacts and Mitigation section of this report, this proposal is unlikely to have significant effects on ambient air quality, water quality, and wetlands. It is unlikely to adversely affect species of plants or insects listed by state agencies as rare, threatened, or endangered.

## **ENVIRONMENTAL IMPACTS AND MITIGATION**

**1. Water Quality and Wetlands.** According to the EA (page 58), the routine activities associated with the proposed action that would impact coastal and marine water quality include vessel discharges (including bilge and ballast water and sanitary waste), and structure installation and removal. Activities associated with staging and fabrication of the meteorological towers and buoys would account for a very small amount of activity at existing ports facilities during the short duration of staging and would therefore be negligible. The document (page 60) states that impacts from vessel discharges associated with the proposed action on harbors, ports, coastal areas, and within the WEAs would be minor, if detectable.

The EA (page 66) finds that no direct impacts on coastal habitats (e.g. wetlands) would occur from routine activities in the WEAs due to the distance of the WEAs from shore. Indirect impacts from routine activities may occur from wake erosion and associated added sediment caused by increased vessel traffic in support of the proposed action. Potential impacts to coastal habitats from an accidental diesel fuel spill, should one occur, would be negligible, localized, and temporary.

**1(a) Agency Jurisdiction.** The State Water Control Board (SWCB) promulgates Virginia's water regulations, covering a variety of permits to include Virginia Pollutant Discharge Elimination System Permit, Virginia Pollution Abatement Permit, Surface and Groundwater Withdrawal Permit, and the Virginia Water Protection Permit (VWPP). The VWPP is a state permit which governs wetlands, surface water, and surface water withdrawals/impoundments. It also serves as § 401 certification of the federal *Clean Water Act* § 404 permits for dredge and fill activities in waters of the U.S. The VWPP Program is under the Office of Wetlands and Water Protection/Compliance, within the DEQ Division of Water Quality Programs. In addition to central office staff that review and issue VWP permits for transportation and water withdrawal projects, the six DEQ regional offices perform permit application reviews and issue permits for the covered activities.

**1(b) Agency Findings.** The DEQ Tidewater Regional Office (TRO) finds there are no permit requirements under DEQ's VPDES program authority for discharges from vessels operating under normal conditions. Also, there are not likely to be permit requirements for stations off shore. However, there could be permitting requirements for stormwater runoff from onshore storage, fabrication and maintenance sites depending on the nature of the activity and the exposure to rainfall.

For additional information, contact DEQ-TRO, Mark Sauer at (757) 518-2105.

**2. Subaqueous Lands.** According to the EA (page 60), sediment disturbance could result from vessel and buoy anchoring, geological and geophysical (G&G) surveys, and structure installation and removal, most of which would take place within the WEAs.

**2(a) Agency Jurisdiction.** The Virginia Marine Resources Commission (VMRC), pursuant to Section 28.2-1200 *et seq.* of the *Code of Virginia*, has jurisdiction over any encroachments in, on, or over any state-owned rivers, streams, or creeks in the Commonwealth.

The VMRC serves as the clearinghouse for the Joint Permit Application (JPA) used by the:

- U.S. Army Corps of Engineers (Corps) for issuing permits pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act;
- DEQ for issuance of a Virginia Water Protection Permit;

- VMRC for encroachments on or over state-owned subaqueous beds as well as tidal wetlands; and
- local wetlands board for impacts to wetlands.

Any jurisdictional impacts would be reviewed by VMRC under the JPA process.

**2(b) Agency Findings.** According to the VMRC, for the leases, surveys and site assessment activities that will occur beyond Virginia's three nautical mile territorial sea, no permits will be required from the VMRC since there would be no activities involving state-owned submerged lands. However, for those surveys that may be conducted within the anticipated transmission corridor within three nautical miles of Virginia's shoreline permits will be required from VMRC. In addition, the EA describes the possible need for construction of certain components at facilities in Virginia. Should this activity require dredging or infrastructure development involving state-owned submerged lands permits will also be required. The JPA should be submitted to the VMRC if state-owned subaqueous lands will be affected.

For additional information, contact VMRC, Tony Watkinson at (757) 247-2250.

**3. Air Emissions.** According to the EA (page 54), due to the short duration and low level of emissions associated with routine activities, potential impacts to onshore ambient air quality from the proposed action would be minor (less than 100 tons per year), if detectable in the relevant affected environment. Prevailing westerly (west to east flow) winds would prevent significant amounts of pollutant emissions from making it to onshore non-attainment areas from offshore areas and the WEAs. Emissions associated with the proposed action in ports and harbors would be negligible, if detectable, due to the low volume of vessel activity in comparison to the volume of current human activity in and around these areas which emit pollution.

**3(a) Agency Jurisdiction.** DEQ's Air Quality Division, on behalf of the State Air Pollution Control Board, is responsible to develop regulations that become *Virginia's Air Pollution Control Law*. DEQ is charged to carry out mandates of the state law and related regulations as well as Virginia's federal obligations under the *Clean Air Act* as amended in 1990. The objective is to protect and enhance public health and quality of life through control and mitigation of air pollution. The division ensures the safety and quality of air in Virginia by monitoring and analyzing air quality data, regulating sources of air pollution, and working with local, state and federal agencies to plan and implement strategies to protect Virginia's air quality. The appropriate regional office is directly responsible for the issue of necessary permits to construct and operate all stationary sources in the region as well as to monitor emissions from these sources for compliance. As a part of this mandate, the environmental documents of new projects to be undertaken in the state are also reviewed. In the case of certain projects, additional evaluation and demonstration must be made under the general conformity provisions of state and federal law.

**3(b) Agency Findings.** According to the DEQ Air Division, Virginia's coastal lands include areas that have been designated as ozone attainment areas, ozone attainment/maintenance areas, and ozone nonattainment areas and emission control areas for and oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOCs). Precursors to ozone (O<sub>3</sub>) pollution include VOCs and NO<sub>x</sub>.

**3(c) Recommendation.** The DEQ Air Division recommends that all reasonable precautions should be taken to limit emissions of VOCs and NO<sub>x</sub>, principally by controlling or limiting the burning of fossil fuels.

**3(d) Requirements.**

**(i) Fugitive Dust**

For onshore activities, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 *et seq.* of the *Regulations for the Control and Abatement of Air Pollution*. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

**(ii) Open Burning**

If activities include open burning, this activity must meet the requirements of 9 VAC 5-130-10 through 9 VAC 5-130-60 and 9 VAC 5-130-100 of the *Regulations* for open burning, and it may require a permit. The *Regulations* provide for, but do not require, the local adoption of a model ordinance concerning open burning. The appropriate local government officials should be contacted to determine what local requirements, if any, exist.

For additional information regarding air comments, contact the DEQ Air Division, Kotur Narasimhan at (804) 698-4415.

**4. Solid and Hazardous Wastes and Hazardous Materials.** According to the EA (page 31), operational waste generated from all vessels associated with the proposed action includes bilge and ballast waters, trash and debris, and sanitary and domestic wastes. The discharge of trash and debris is prohibited (33 CFR 151.51-77) unless it is passed through a comminutor and can pass through a 25-mm mesh screen. All other trash and debris must be returned to shore for proper disposal with municipal and solid waste



**4(a) Agency Jurisdiction.** Solid and hazardous wastes in Virginia are regulated by the Virginia Department of Environmental Quality, the Virginia Waste Management Board (VWMB) and the U.S. Environmental Protection Agency. They administer programs created by the federal *Resource Conservation and Recovery Act*, *Comprehensive Environmental Response Compensation and Liability Act*, commonly called Superfund, and the *Virginia Waste Management Act*. DEQ administers regulations established by the VWMB and reviews permit applications for completeness and conformance with facility standards and financial assurance requirements. All Virginia localities are required, under the Solid Waste Management Planning Regulations, to identify the strategies they will follow on the management of their solid wastes to include items such as facility siting, long-term (20-year) use, and alternative programs such as materials recycling and composting.

**4(b) Agency Findings.** DEQ's Division of Land Protection and Revitalization (DLPR) (formerly the Waste Division) finds that there is no information available to DLPR that characterizes waste management in the study area. Discussion of potential spills of fuel products in waters resulting from the project are water quality and pollution prevention issues. The submittal did discuss deployment of the research vessels from a number of ports along the eastern seaboard of the U.S., including Virginia. However, no discussion of potential waste management activities or issues associated with the project study or project deployment areas was mentioned.

No specific project sites or deployment areas were provided other than the oceanographic areas to be studied. Therefore, DEQ-DLPR is unable to identify if there are any specific issues which should be addressed by the proposed project other than the generally stated waste management comments provided below.

DEQ-DLPR comments are typically provided under the following categories:

1. Hazardous Waste Facilities.
2. Solid Waste Facilities.
3. Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Sites.
4. Formerly Used Defense (FUDs) Sites.
5. Voluntary Remediation Sites.
6. Petroleum Release Sites.

As no activities have been proposed at specific land-based locations, DEQ-DLPR is unable to provide information related with the above waste issues or categories other than the general comments below.

#### **4(c) Requirements.**

##### ***(i) Generated Waste***

Any soil or sediment that is suspected of contamination or wastes that are generated must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations. Some of the applicable state laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9 VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9 VAC 20-81); Virginia Regulations for the Transportation of Hazardous Materials (9 VAC 20-110). Some of the applicable federal laws and regulations are: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Part 107.

Contaminated media which may be impacted from other on-site releases from solid waste management units (SWMUs), areas of concern (AOCs), or from other pollution sources may require specific handling, storage, treatment, and/or disposal requirements for the drilling mud and soil removed from the facility's construction project.

##### ***(ii) Asbestos-containing Material and Lead-based Paint***

All structures and infrastructure should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition, renovation or removal. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, state regulations 9 VAC 20-81-620 for ACM and 9 VAC 20-60-261 for LBP must be followed.

**4(d) Recommendations.** DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

Questions or requests for further information may be directed to DEQ-LPRD, Richard Criqui at (804) 698-4013.

**5. Natural Heritage Resources.** The EA does not specifically address natural heritage resources.

**5(a) Agency Jurisdiction** The mission of the Virginia Department of Conservation and Recreation is to conserve Virginia's natural and recreational resources. DCR supports a variety of environmental programs organized within seven divisions including the Division of Natural Heritage. The Natural Heritage Program's (DCR-DNH) mission is conserving Virginia's biodiversity through inventory, protection, and stewardship. The

*Virginia Natural Area Preserves Act*, 10.1-209 through 217 of the *Code of Virginia*, was passed in 1989 and codified DCR's powers and duties related to statewide biological inventory: maintaining a statewide database for conservation planning and project review, land protection for the conservation of biodiversity, and the protection and ecological management of natural heritage resources (the habitats of rare, threatened, and endangered species, significant natural communities, geologic sites, and other natural features).

**5(b) Agency Findings.** DCR-DNH finds that the Roseate tern (*Sterna dougallii*, G4/SHB/SZN/LE/LE) and the Piping plover (*Charadrius melodus*, G3/S2B/S1N/LT/LT) may occur in the Atlantic OCS waters.

In addition, DCR-DNH notes that the EA indicates that sea turtles and marine mammals utilize the project area and may be impacted by various proposed activities including noise from seismic surveys, construction and decommissioning of towers as well as vessel collisions.

**5(c) Recommendations.** DCR-DNH supports the use of the proposed mitigation measures described in the EA, including anti-perching devices, imposing lighting restrictions and prohibition of the use of guy wires to minimize and avoid impacts to avian species within the WEA.

DCR-DNH recommends the following:

- Coordinate with the Virginia Department of Game and Inland Fisheries (DGIF), United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to ensure compliance with the protected species legislation.
- Use meteorological buoys as an alternative to traditional meteorological towers for the collection of data due to the reduced installation time and overall potential environmental impact.
- Develop and implement an emergency spill plan as required by the United States Coast Guard (USCG) to avoid or minimize impacts to natural heritage resources including sensitive coastal areas from accidental diesel fuel spills and other contaminants.

For additional information, contact DCR-DNH, Rene Hypes at (804) 371-2708.

**6. Wildlife Resources and Protected Species.** According to the EA (page 64), the proposed leases would be located at least 7 to 18 nm from the nearest shoreline. Therefore, site characterization surveys, and the construction, operation and decommissioning activities of meteorological towers/buoys occurring within the proposed lease areas would have no direct impact on coastal habitats. However, coastal vessel traffic associated with the proposed action and the use of existing coastal and port facilities have the potential to contribute to the impacts on coastal habitats.



**6(a) Agency Jurisdiction.** The Department of Game and Inland Fisheries (DGIF), as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state or federally listed endangered or threatened species, but excluding listed insects (*Virginia Code* Title 29.1). The DGIF is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S.C. sections 661 *et seq.*), and provides environmental analysis of projects or permit applications coordinated through DEQ and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce, or compensate for those impacts.

**6(b) Recommendations.** DGIF offers the following recommendations which are reiterated from its previous comments to the earlier Programmatic Environmental Impact Statement.

***(i) Biological Monitoring***

Project-proponents should provide a detailed description of site-specific biological monitoring protocols. Site-specific pre- and post-construction biological monitoring protocols should be developed and implemented in coordination with federal and state resource agencies. DGIF will provide guidance as appropriate.

***(ii) Meteorological Tower Lighting Specifications***

A detailed description of proposed lighting specifications for MET towers should be provided to DGIF. After reviewing this information, DGIF will provide further guidance, as appropriate.

***(iii) MET Tower Pre-construction Acoustic Monitoring Equipment Specifications***

Acoustic bat monitoring devices (e.g. Anabat detectors or other comparable remote bat detection devices) should be deployed on all MET towers. Deploying multiple acoustic bat monitoring devices on a single MET tower, whenever practicable, could help improve data collection reliability in harsh marine environment. Use of acoustic bat monitoring devices will provide pre-construction data characterizing off-shore bat activity.

***(iv) MET Tower Post-construction Monitoring and Mitigation***

One or more existing MET tower(s) should be left in place in areas where wind development occurs to provide post-construction monitoring data, based on site-specific monitoring protocols. Post-construction monitoring using existing equipment deployed on existing MET towers will provide data that could be used to evaluate potential

changes in bat activity associated with climatic variables (e.g., wind, fronts, rain, etc.). Comparing pre- and post-construction acoustic monitoring data can be used to evaluate potential changes in bat activity associated with the turbines. All pre- and post-construction data collected from MET towers could be used to develop mitigation measures, as appropriate. After reviewing this information, DGIF will provide further guidance, as appropriate.

***(v) MET Tower Decommissioning Procedure***

The decommissioning of MET towers should occur within 6 months (rather than within one year) after cancellation, expiration, relinquishment, or other termination of the lease. Use a MET tower design that would result in minimal impact and be removable without explosives whenever practicable.

***(vi) Specifications of Proposed High Resolution Geophysical (HRG) Survey Equipment and Acoustic Doppler Current Profilers (ADCP)***

A detailed description of proposed HRG and ADCP survey equipment specifications should be available to address potential impacts to marine mammals. After reviewing this information, DGIF will provide further guidance.

Contact DGIF, Ernie Aschenbach at (804) 367-2733, for additional information regarding these comments.

**7. Water Supply.**

**7(a) Agency Jurisdiction.** The Virginia Department of Health (VDH), Office of Drinking Water (ODW) reviews projects for the potential to impact public drinking water sources (groundwater wells and surface water intakes).

**7(b) Agency Findings.** VDH-ODW has no comments on the proposal.

Contact VDH, Diedre Forsgren at (804) 864-7241 for additional information.

**8. Historic Structures and Archaeological Resources.** According to the EA (page 117), impacts to archaeological resources offshore New Jersey, Delaware, Maryland and Virginia to the seaward extent of the WEAs could occur from bottom disturbance and spills associated with site characterization surveys and site assessment activities (the installation of meteorological towers/buoys).

**8(a) Agency Jurisdiction.** The Department of Historic Resources (DHR) conducts reviews of projects to determine their effect on historic structures or cultural resources under its jurisdiction. DHR, as the designated State's Historic Preservation Office, ensures that federal actions comply with Section 106 of the *National Historic Preservation Act of 1962* (NHPA), as amended, and its implementing regulation at 36

CFR Part 800. The NHPA requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places. Section 106 also applies if there are any federal involvements, such as licenses, permits, approvals or funding.

**8(b) Agency Findings.** According to DHR, the agency has been in direct consultation with BOEMRE regarding this project and will provide comments directly to BOEMRE pursuant to Section 106 of the *National Historic Preservation Act* which requires federal agencies to consider the impacts of their projects on historic properties.

For additional information, contact DHR, Roger Kirchen at (804) 482-6091.

## **FEDERAL CONSISTENCY UNDER THE COASTAL ZONE MANAGEMENT ACT**

Pursuant to the Coastal Zone Management Act of 1972 (§ 1456(c)), as amended, and the federal consistency regulations implementing the CZMA (15 CFR Part 930, Subpart C, § 930.30 *et seq.*) federal actions that can have reasonably foreseeable effects on Virginia's coastal uses or resources must be conducted in a manner which is consistent, to the maximum extent practicable, with the Virginia Coastal Zone Management Program (VCP). The VCP is comprised of a network of programs administered by several agencies (see Attachment 1). In order to be consistent with the VCP, the federal agency must obtain all the applicable permits and approvals listed under the enforceable policies of the VCP prior to commencing the project.

### **Federal Consistency Public Participation**

In accordance with 15 CFR § 930.2, public notice of the proposed action was published on DEQ's web site from July 15, 2011 to July 29, 2011. No public comments were received in response to the notice.

### **Federal Consistency Concurrence**

Based on our review of BOEMRE's consistency determination, and the comments and recommendations submitted by agencies administering the enforceable policies of the VCP, DEQ concurs that this proposal is consistent with the VCP. However, other state approvals which may apply to this project are not included in this concurrence. Therefore, BOEMRE must ensure that this action is constructed and operated in accordance with all applicable federal, state, and local laws and regulations. We encourage BOEMRE to consider the advisory policies of the VCP as well (see Attachment 2).

## **PREFERRED ALTERNATIVE A**

According to the Department of Mines, Minerals and Energy (DMME) (see detailed comments attached), the Virginia WEA was developed through collaboration by Virginia

Coastal Energy Research Consortium (VCERC) (a legislatively created body made up of Virginia universities, state and local governments, and industry partners), BOEMRE's Virginia Renewable Energy Task Force, and other stakeholders, and includes 22 contiguous OCS blocks and 4 adjoining partial blocks, as reflected in the Draft EA Alternative A (the preferred alternative).

The EA considers several "reasonable" geographic and non-geographic alternatives and evaluates associated consequences, including potential user conflicts resulting from each alternative. Alternative A (the preferred alternative) will support development of Virginia's offshore wind energy resources, as well as a decision by BOEMRE to issue research leases within the Virginia Alternative A WEA.

Alternative A was developed as the result of months of research and input from VCERC and numerous other stakeholders, including academic, government, military, and private sector maritime interests. The 22 OCS lease blocks and 4 partial blocks resulted from negotiation by all parties, and after much consolidation and ceding of many of the lease blocks originally assessed as having economically attractive wind resources. Virginia fully supports the designation of this area as BOEMRE moves forward with leasing and development off of Virginia's coast.

According to DMME, while the Commonwealth supports BOEMRE's preferred alternative, it has reservations concerning Alternative E (Removal of Inclement Weather Diversion Areas Offshore Virginia). Virginia understands and appreciates the interest in preserving safe inclement weather navigation for offshore barge traffic, and it is critically important that development of Virginia's offshore wind resource avoid interference with important commercial shipping interests. However, eliminating the eight lease blocks as proposed in Alternative E would split the Virginia WEA into two separate parcels, which would undermine the commercial value of the area by creating logistical and economic challenges for commercial developers, reducing the economies of scale necessary to attract supply chain interests, and ultimately increasing the cost of power that will be generated by offshore wind development. The Commonwealth believes the concerns addressed by Alternative E can be effectively accommodated in the leasing and development process, without the necessity of withdrawing entirely the eight identified blocks from the commercially available wind area, and are exploring several specific solutions with members of the American Waterways Operators (AWO).

Virginia supports and is actively pursuing an "all of the above" strategy for expanding energy production in Virginia. This includes strong support and energetic efforts to promote development of Virginia's offshore wind resources. Therefore, the Commonwealth urges BOEMRE to adopt **Alternative A** as described in the draft EA, and encourage every available effort to accelerate and streamline the leasing and permitting process.

Thank you for the opportunity to review the Environmental Assessment and Federal Consistency Determination for the Commercial Wind Lease Issuance and Site Characterization Activities on the Atlantic Outer Continental Shelf Offshore New Jersey,

Commercial Wind Lease Issuance and Site Characterization Activities on the Atlantic OCS  
Offshore New Jersey, Delaware, Maryland, and Virginia

Delaware, Maryland, and Virginia. Detailed comments of reviewing agencies are attached for your review. Please contact me at (804) 698-4325 or John Fisher at (804) 698-4339 for clarification of these comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ellie Irons".

Ellie Irons, Program Manager  
Environmental Impact Review

Enclosures

Ec: Cindy Keltner, DEQ-TRO  
Richard Criqui, DEQ-DLPR  
Kotur Narasimhan, DEQ-Air  
Laura McKay, DEQ-VCP  
Ernie Aschenbach, DGIF  
Robbie Rhur, DCR  
Barry Matthews, VDH  
Keith R. Tignor, VDACS  
Tony Watkinson, VMRC  
Conrad Spangler, DMME  
Pam Mason, VIMS  
Roger Kirchen, DHR  
John Carlock, HRPDC  
Elaine Meil, A-NPDC  
George Hagerman, VCERC





## **COMMONWEALTH of VIRGINIA**

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### **Attachment 1**

### **Enforceable Regulatory Programs comprising Virginia's Coastal Zone Management Program (VCP)**

- a. **Fisheries Management** - The program stresses the conservation and enhancement of finfish and shellfish resources and the promotion of commercial and recreational fisheries to maximize food production and recreational opportunities. This program is administered by the Marine Resources Commission (VMRC); Virginia Code 28.2-200 to 28.2-713 and the Department of Game and Inland Fisheries (DGIF); Virginia Code 29.1-100 to 29.1-570.

The State Tributyltin (TBT) Regulatory Program has been added to the Fisheries Management program. The General Assembly amended the Virginia Pesticide Use and Application Act as it related to the possession, sale, or use of marine antifoulant paints containing TBT. The use of TBT in boat paint constitutes a serious threat to important marine animal species. The TBT program monitors boating activities and boat painting activities to ensure compliance with TBT regulations promulgated pursuant to the amendment. The VMRC, DGIF, and Virginia Department of Agriculture Consumer Services (VDACS) share enforcement responsibilities; Virginia Code 3.1-249.59 to 3.1-249.62.

- b. **Subaqueous Lands Management** - The management program for subaqueous lands establishes conditions for granting or denying permits to use state-owned bottomlands based on considerations of potential effects on marine and fisheries resources, tidal wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards established by the Department of Environmental Quality (DEQ). The program is administered by the Marine Resources Commission; Virginia Code 28.2-1200 to 28.2-1213.
- c. **Wetlands Management** - The purpose of the wetlands management program is to preserve wetlands, prevent their despoliation, and accommodate economic development in a manner consistent with wetlands preservation.
- (1) The tidal wetlands program is administered by the Marine Resources Commission; Virginia Code 28.2-1301 through 28.2-1320.
  - (2) The Virginia Water Protection Permit program administered by DEQ includes protection of wetlands --both tidal and non-tidal; Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act.

Attachment 1 continued

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- d. Dunes Management - Dune protection is carried out pursuant to The Coastal Primary Sand Dune Protection Act and is intended to prevent destruction or alteration of primary dunes. This program is administered by the Marine Resources Commission; Virginia Code 28.2-1400 through 28.2-1420.
- e. Non-point Source Pollution Control – (1) Virginia's Erosion and Sediment Control Law requires soil-disturbing projects to be designed to reduce soil erosion and to decrease inputs of chemical nutrients and sediments to the Chesapeake Bay, its tributaries, and other rivers and waters of the Commonwealth. This program is administered by the Department of Conservation and Recreation; Virginia Code 10.1-560 et seq.  
  
(2) Coastal Lands Management is a state-local cooperative program administered by the DCR's Division of Chesapeake Bay Local Assistance and 84 localities in Tidewater (see i) Virginia; Virginia Code §10.1-2100 –10.1-2114 and 9 VAC10-20 et seq.
- f. Point Source Pollution Control - The point source program is administered by the State Water Control Board (DEQ) pursuant to Virginia Code 62.1-44.15. Point source pollution control is accomplished through the implementation of:
  - (1) the National Pollutant Discharge Elimination System (NPDES) permit program established pursuant to Section 402 of the federal Clean Water Act and administered in Virginia as the Virginia Pollutant Discharge Elimination System (VPDES) permit program.
  - (2) The Virginia Water Protection Permit (VWPP) program administered by DEQ; Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act.
- g. Shoreline Sanitation - The purpose of this program is to regulate the installation of septic tanks, set standards concerning soil types suitable for septic tanks, and specify minimum distances that tanks must be placed away from streams, rivers, and other waters of the Commonwealth. This program is administered by the Department of Health (Virginia Code 32.1-164 through 32.1-165).
- h. Air Pollution Control - The program implements the federal Clean Air Act to provide a legally enforceable State Implementation Plan for the attainment and maintenance of the National Ambient Air Quality Standards. This program is administered by the State Air Pollution Control Board (Virginia Code 10.1-1300 through §10.1-1320).
- (i) Coastal Lands Management is a state-local cooperative program administered by the DCR's Division of Chesapeake Bay Local Assistance and 84 localities in Tidewater, Virginia established pursuant to the Chesapeake Bay Preservation Act; Virginia Code §10.1-2100 –10.1-2114 and Chesapeake Bay Preservation Area Designation and Management Regulations; Virginia Administrative Code 9 VAC10-20 et seq.

## Attachment 2

### Advisory Policies for Geographic Areas of Particular Concern

- a. Coastal Natural Resource Areas - These areas are vital to estuarine and marine ecosystems and/or are of great importance to areas immediately inland of the shoreline. Such areas receive special attention from the Commonwealth because of their conservation, recreational, ecological, and aesthetic values. These areas are worthy of special consideration in any planning or resources management process and include the following resources:
  - a) Wetlands
  - b) Aquatic Spawning, Nursery, and Feeding Grounds
  - c) Coastal Primary Sand Dunes
  - d) Barrier Islands
  - e) Significant Wildlife Habitat Areas
  - f) Public Recreation Areas
  - g) Sand and Gravel Resources
  - h) Underwater Historic Sites.
- b. Coastal Natural Hazard Areas - This policy covers areas vulnerable to continuing and severe erosion and areas susceptible to potential damage from wind, tidal, and storm related events including flooding. New buildings and other structures should be designed and sited to minimize the potential for property damage due to storms or shoreline erosion. The areas of concern are as follows:
  - i) Highly Erodible Areas
  - ii) Coastal High Hazard Areas, including flood plains.
- c. Waterfront Development Areas - These areas are vital to the Commonwealth because of the limited number of areas suitable for waterfront activities. The areas of concern are as follows:
  - i) Commercial Ports
  - ii) Commercial Fishing Piers
  - iii) Community Waterfronts

Although the management of such areas is the responsibility of local government and some regional authorities, designation of these areas as Waterfront Development Areas of Particular Concern (APC) under the VCRMP is encouraged. Designation will allow the use of federal CZMA funds to be used to assist planning for such areas and the implementation of such plans. The VCRMP recognizes two broad classes of priority uses for waterfront development APC:

- i) water access dependent activities;
- ii) activities significantly enhanced by the waterfront location and complementary to other existing and/or planned activities in a given waterfront area.

### **Advisory Policies for Shorefront Access Planning and Protection**

- a. Virginia Public Beaches - Approximately 25 miles of public beaches are located in the cities, counties, and towns of Virginia exclusive of public beaches on state and federal land. These public shoreline areas will be maintained to allow public access to recreational resources.
- b. Virginia Outdoors Plan - Planning for coastal access is provided by the Department of Conservation and Recreation in cooperation with other state and local government agencies. The Virginia Outdoors Plan (VOP), which is published by the Department, identifies recreational facilities in the Commonwealth that provide recreational access. The VOP also serves to identify future needs of the Commonwealth in relation to the provision of recreational opportunities and shoreline access. Prior to initiating any project, consideration should be given to the proximity of the project site to recreational resources identified in the VOP.
- c. Parks, Natural Areas, and Wildlife Management Areas - Parks, Wildlife Management Areas, and Natural Areas are provided for the recreational pleasure of the citizens of the Commonwealth and the nation by local, state, and federal agencies. The recreational values of these areas should be protected and maintained.
- d. Waterfront Recreational Land Acquisition - It is the policy of the Commonwealth to protect areas, properties, lands, or any estate or interest therein, of scenic beauty, recreational utility, historical interest, or unusual features which may be acquired, preserved, and maintained for the citizens of the Commonwealth.
- e. Waterfront Recreational Facilities - This policy applies to the provision of boat ramps, public landings, and bridges which provide water access to the citizens of the Commonwealth. These facilities shall be designed, constructed, and maintained to provide points of water access when and where practicable.
- f. Waterfront Historic Properties - The Commonwealth has a long history of settlement and development, and much of that history has involved both shorelines and near-shore areas. The protection and preservation of historic shorefront properties is primarily the responsibility of the Department of Historic Resources. Buildings, structures, and sites of historical, architectural, and/or archaeological interest are significant resources for the citizens of the Commonwealth. It is the policy of the Commonwealth and the VCRMP to enhance the protection of buildings, structures, and sites of historical, architectural, and archaeological significance from damage or destruction when practicable.



DIVISIONS  
ENERGY  
GAS AND OIL  
GEOLOGY AND MINERAL RESOURCES  
MINED LAND RECLAMATION  
MINERAL MINING  
MINES  
ADMINISTRATION

# COMMONWEALTH OF VIRGINIA

*Department of Mines, Minerals and Energy*

Washington Building / 8<sup>th</sup> Floor  
1100 Bank Street  
Richmond, Virginia 23219  
(804) 692-3200 FAX (804) 692-3237  
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**AUG 08 2011**

**DEQ-Office of Environmental  
Impact Review**

August 8, 2011

Mr. John E. Fisher  
Virginia Department of Environmental Quality  
Division of Environmental Enhancement  
Office of Environmental Impact Review  
629 East Main Street, Sixth Floor  
Richmond VA 23219

RE: Commonwealth of Virginia, Department of Environmental Quality Consistency Review  
of the BOEMRE Commercial Wind Lease Draft Environmental Assessment

Dear Mr. Fisher:

The Department of Mines, Minerals and Energy, on behalf of the Commonwealth of Virginia, respectfully submits the enclosed comments in response to the recently released Draft Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Characterization Activities on the Atlantic Outer Continental Shelf Offshore New Jersey, Delaware, Maryland, and Virginia - Draft Environmental Assessment."

In February 2011, the BOEMRE issued a Notice of Intent (NOI) identifying areas of the Outer Continental Shelf (OCS) offshore the Mid-Atlantic States of New Jersey, Delaware, Maryland, and Virginia that appeared to provide the most suitable opportunity for wind energy development, while presenting the fewest apparent user conflicts.

The Virginia WEA was developed and refined through extensive consultation with numerous Virginia stakeholders, Federal agencies and BOEMRE's Virginia Renewable Energy Task Force, first convened on December 8, 2009.

Much of the initial research and assessment of Virginia's offshore wind resources, competing ocean uses and potential use conflicts was developed through the efforts of the Virginia Coastal Energy Research Consortium (VCERC) – a legislatively created body made up of Virginia universities, state and local governments, and industry partners. Since July 2007,



VCERC has researched coastal energy technologies and expanded Virginia's knowledge base to assess Virginia's offshore potential.

Virginia's WEA was developed through collaboration by VCERC, BOEMRE's Virginia Renewable Energy Task Force, and other stakeholders, and initially included 22 contiguous OCS lease blocks, and 41 sub blocks, or aliquots, in 5 partial OCS blocks. Three of these aliquots (in OCS Block 6109) were included in an unsolicited application for a renewable energy research lease to be held by the Virginia Department of Mines, Minerals and Energy. The request contemplated placement of three wind test turbines on these three aliquots. Subsequent to BOEMRE's receipt of the research lease application, the U.S. Coast Guard and commercial shipping interests voiced concerns that wind turbines in OCS Block 6109 would constitute a hazard to navigation, and these three aliquots have therefore been removed from leasing consideration in Virginia's WEA. The final WEA includes only the original 22 contiguous OCS blocks and 4 adjoining partial blocks, as reflected in the Draft EA *Alternative A* (the preferred alternative).

The EA considers several "reasonable" geographic and non-geographic alternatives and evaluates associated consequences, including potential user conflicts resulting from each alternative. *Alternative A* (the preferred alternative) will support development of Virginia's offshore wind energy resources, as well as a decision by BOEMRE to issue research leases within the Virginia *Alternative A* WEA.

*Alternative A* was developed as the result of months of research and input from VCERC and numerous other stakeholders, including academic, government, military, and private sector maritime interests. The 22 OCS lease block and 4 partial blocks is the result of negotiation by all parties, and after much consolidation and ceding of many of the lease blocks originally assessed as having economically attractive wind resources. Virginia fully supports the designation of this area as BOEMRE moves forward with leasing and development off of Virginia's coast.

While expressing our support for BOEMRE's preferred alternative, we must also express reservations concerning Alternative E (Removal of Inclement Weather Diversion Areas Offshore Virginia). We understand and appreciate the interest in preserving safe inclement weather navigation for offshore barge traffic, and it is critically important that development of Virginia's offshore wind resource avoid interference with important commercial shipping interests. Eliminating the eight lease blocks as proposed in *Alternative E* would split the Virginia WEA into two separate parcels, which would undermine the commercial value of the area by creating logistical and economic challenges for commercial developers, reducing the economies of scale necessary to attract supply chain interests, and ultimately increasing the cost of power that will be generated by offshore wind development. We believe the concerns addressed by Alternative E can be effectively accommodated in the leasing and development process, without the necessity of withdrawing entirely the eight identified blocks from the commercially available wind area, and are exploring several specific solutions with members of the American Waterways Operators (AWO).

Mr. John E. Fisher  
August 8, 2011  
Page 3

Virginia supports and is actively pursuing an "all of the above" strategy for expanding energy production in Virginia. This includes strong support and energetic efforts to promote development of Virginia's offshore wind resources. Therefore, we urge BOEMRE to adopt *Alternative A* as described in the draft EA, and encourage every available effort to accelerate and streamline the leasing and permitting process.

Sincerely,

A handwritten signature in dark ink, appearing to read "C.T. Spangler, III". The signature is fluid and stylized, with the last name "Spangler" being more prominent.

Conrad T. Spangler, III  
Director

c: Carrie Cantrell  
Deputy Secretary of Commerce and Trade

Maureen Matsen  
Deputy Secretary of Natural Resources and  
Senior Advisor on Energy

Arthur Moye, Jr.  
Chairman, Virginia Offshore Wind Development Authority

George Hagerman  
Virginia Coastal Energy Research Consortium



DEPARTMENT OF ENVIRONMENTAL QUALITY  
TIDEWATER REGIONAL OFFICE  
ENVIRONMENTAL IMPACT REVIEW COMMENTS

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Impact Review

August 8, 2011

**PROJECT NUMBER:** 11-130F

**PROJECT TITLE:** Commercial Wind Lease and site characterization activities on the Atlantic Outer Continental Shelf Offshore

As Requested, TRO staff has reviewed the supplied information and has the following comments:

**Petroleum Storage Tank Cleanups:**

No comments.

**Petroleum Storage Tank Compliance/Inspections:**

No comments. No regulated petroleum storage tanks included in project.

**Virginia Water Protection Permit Program (VWPP):**

**Air Permit Program :**

No comments.

**Water Permit Program :**

VPDES Permit Section – There are no permit requirements under DEQ's authority for discharges from vessels operating under normal conditions. Also, there are not likely to be permit requirements for stations off shore. However, there could be permitting requirements for storm water runoff from onshore storage, fabrication and maintenance sites depending on the nature of the activity and the exposure to rainfall.

Ground Water – No comments

**Waste Permit Program :**

No comment

The staff from the Tidewater Regional Office thanks you for the opportunity to provide comments.

Sincerely,

Cindy Keltner  
Environmental Specialist II  
5636 Southern Blvd.  
VA Beach, VA 23462  
(757) 518-2167  
Cindy.Keltner@deq.virginia.gov

**Fisher, John (DEQ)**

---

**From:** Watkinson, Tony (MRC)  
**Sent:** Friday, July 29, 2011 3:50 PM  
**To:** Fisher, John (DEQ)  
**Cc:** O'Reilly, Rob (MRC); Travelstead, Jack (MRC)  
**Subject:** Consistency Determination Project 11-130F

John,

This is in response to your request for comments regarding the consistency determination for Commercial Wind Lease Issuance & Site Characterization Activities on the Atlantic Outer Continental Shelf Offshore NJ, DE, MD, and VA proposed by the Bureau of Ocean Energy Management, Regulation and Enforcement.

For the leases, surveys and site assessment activities that will occur beyond Virginia's three nautical mile territorial sea, no permits will be required from the Virginia Marine Resources Commission (VMRC) since there would be no activities involving State-owned submerged lands. However, for those surveys that may be conducted within the anticipated transmission corridor within three nautical miles of Virginia's shoreline permits will be required from VMRC. In addition, the draft material also describes the possible need for construction of certain components at facilities in Virginia. Should this activity require dredging or infrastructure development involving State-owned submerged lands permits will also be required. The Local-State-Federal Joint Permit Application should be use.

Should you have any question regarding the VMRC permit responsibilities, please do not hesitate to contact me.

Tony Watkinson  
Chief, Habitat Management Division  
Virginia Marine Resources Commission

757-247-2250



11-103F.pdf

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DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF AIR PROGRAM COORDINATION

ENVIRONMENTAL REVIEW COMMENTS APPLICABLE TO AIR QUALITY

TO: John E. Fisher

DEQ - OEIA PROJECT NUMBER: 11 - 130F

PROJECT TYPE: ☐ STATE EA / EIR ☒ FEDERAL EA / EIS ☐ SCC

**X CONSISTENCY DETERMINATION**

PROJECT TITLE: COMMERCIAL WIND LEASE ISSUANCE & SITE CHARACTERIZATION  
ACTIVITIES ON THE ATLANTIC OUTER CONTINENTAL SHELF OFFSHORE  
NJ, DE, MD, AND VA

PROJECT SPONSOR: DOI / BUREAU OF OCEAN ENERGY MANAGEMENT

PROJECT LOCATION: **X PARTLY OZONE NON ATTAINMENT AND**  
**EMISSION CONTROL AREA FOR NOX & VOC**

REGULATORY REQUIREMENTS MAY BE APPLICABLE TO: **X SITE CHARACTERIZATION**  
☐ OPERATION

**STATE AIR POLLUTION CONTROL BOARD REGULATIONS THAT MAY APPLY:**

1. ☐ 9 VAC 5-40-5200 C & 9 VAC 5-40-5220 E - STAGE I
2. ☐ 9 VAC 5-40-5200 C & 9 VAC 5-40-5220 F - STAGE II Vapor Recovery
3. ☐ 9 VAC 5-40-5490 et seq. - Asphalt Paving operations
4. **X** 9 VAC 5-130 et seq. - Open Burning
5. **X** 9 VAC 5-50-60 et seq. Fugitive Dust Emissions
6. ☐ 9 VAC 5-50-130 et seq. - Odorous Emissions; Applicable to \_\_\_\_\_
7. ☐ 9 VAC 5-50-160 et seq. - Standards of Performance for Toxic Pollutants
8. ☐ 9 VAC 5-50-400 Subpart \_\_\_\_\_, Standards of Performance for New Stationary Sources, designates standards of performance for the \_\_\_\_\_
9. ☐ 9 VAC 5-80-10 et seq. of the regulations - Permits for Stationary Sources
10. ☐ 9 VAC 5-80-1700 et seq. Of the regulations - Major or Modified Sources located in PSD areas. This rule may be applicable to the \_\_\_\_\_
11. ☐ 9 VAC 5-80-2000 et seq. of the regulations - New and modified sources located in non-attainment areas
12. ☐ 9 VAC 5-80-800 et seq. Of the regulations - Operating Permits and exemptions. This rule may be applicable to \_\_\_\_\_

**COMMENTS SPECIFIC TO THE PROJECT:**

All precautions are necessary to restrict the emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>).



(Kotur S. Narasimhan)  
Office of Air Data Analysis

DATE: July 15, 2011





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**MEMORANDUM**

**TO:** John E. Fisher, Environmental Program Planner

**FROM:** Richard J. Criqui, Jr., C.P.S.S., DLPR Review Coordinator

**DATE:** August 3, 2011

**COPIES:** Leslie A. Romanchik, Hazardous Waste Program Manager  
EIR File

**SUBJECT:** Consistency Determination Letter Report – Commercial Wind Lease Issuance & Site Characterization Activities on the Atlantic Outer Continental Shelf Offshore NJ, DE, MD, and VA - DEQ Project No. 11-130F – Review Comments

A handwritten signature in blue ink, appearing to read "Richard J. Criqui, Jr.", is written over the "FROM:" line of the memorandum.

The Division of Land Protection and Revitalization (DLPR) (former Waste Division) has completed its review of the Consistency Determination Report (Report) entitled *Commercial Wind Lease Issuance & Site Characterization Activities on the Atlantic Outer Continental Shelf Offshore NJ, DE, MD, and VA* dated June 30, 2011. The project site is located off shore and, of course, has no zip codes assigned to the areas of the project.

The U.S. Department of Interior, Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE), has prepared a Regional Consistency Determination (CD) Report to determine whether issuing leases and approving site assessment activities within the Mid-Atlantic Wind Energy Areas (WEAs) offshore of New Jersey, Delaware, Maryland, and Virginia on the Outer Continental Shelf (OCS) is consistent, to the maximum extent practicable, with the provisions identified as enforceable by the Coastal Zone Management Programs of the above noted States.

BOEMER regulations require that the lessee provide the results of a number of surveys with both a Site Assessment Plan (SAP) and a Construction and Operations Plan (COP) including: a shallow hazards survey; geological survey; geotechnical survey; archaeological resource survey; and a biological survey. These are referred to "site characterization" activities by BOEMRE. The submittal has addressed the project under the following topics:

1. Offshore Site Characterization Surveys
2. Meteorological Towers and Buoys.
3. Coastal Activity.
4. Vessel Traffic.
5. State Enforceable Policies of the Coastal Zone Management Act (CZMA)
6. Regional Consistency Determination

A table was also provided addressing the nine categories under the CZMA. High resolution site surveys and sub-bottom profiling tools are to be used to investigate the shallow sub-surface for geo-hazards and soil conditions, as well as to identify potential benthic biological communities or habitats and archeological resources. The assessments will provide a detailed knowledge of the surface and

subsurface geological and geotechnical (G&G) conditions at the project area sites so to provide the needed information associated with the design, fabrication, installation, operation, and removal of structures.

We have the following comments concerning the Report and related waste issues associated with this project:

This Report under Project No. 11-130F did not address potential solid waste and/or hazardous waste issues or contaminated media with any aspect of the project. The extent of the review and research of both solid and hazardous waste issues at the site is unclear. This Report, under DEQ Project No. 11-130F, does not state that DEQ's databases were searched, nor does it indicate that information was obtained from the DEQ's DLPR files.

However, as the proposal intends to perform an exploration and site assessment of the ocean floor, the DLPR staff does not believe there is any information available to the staff which characterizes waste management in the areas to be studied and which are under the categories typically evaluated by the staff of the DLPR. The submittal did discuss potential spills of fuel products in waters resulting from the project; however, this is a water quality issue, and a pollution prevention issue. The submittal did discuss deployment of the research vessels from a number of ports along the eastern seaboard of the U.S., including Virginia. No discussion of potential waste management activities or issues associated with the project study or project deployment areas was mentioned.

No specific project sites or deployment areas were provided other than the oceanographic areas to be studied. Therefore, the staff is unable to identify if there are any specific issues which should be addressed by the proposed project other than the generally stated waste management comments provided below.

The staff's summary comments are typically provided under the following categories:

1. Hazardous Waste Facilities.
2. Solid Waste Facilities.
3. CERCLA Sites.
4. FUDs Sites.
5. Voluntary Remediation Sites.
6. Petroleum Release Sites.

As no activities have been proposed at specific land based locations, the staff is unable to provide information related with the above waste issues or categories other than the general comments below.

## **GENERAL COMMENTS**

### **Soil, Sediment, and Waste Management**

Any soil or sediment that is suspected of contamination or wastes that are generated from this project should be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Some of the applicable State laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-81); Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal laws and regulations are: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Part 107.

Contaminated media which may be impacted from other on-site releases from solid waste management units (SWMUs), areas of concern (AOCs), or from other pollution sources may require specific handling, storage, treatment, and/or disposal requirements for the drilling mud and soil removed from the facility's construction project.

**Asbestos and/or Lead-based Paint**

All structures and infrastructure being demolished/renovated/ removed associated with the project should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, State regulations 9VAC 20-81-620 for ACM and 9VAC 20-60-261 for LBP must be followed.

**Pollution Prevention – Reuse - Recycling**

Please note that DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

If you have any questions or need further information, please contact Richard Criqui at (804) 698-4013.

Douglas W. Domenech  
Secretary of Natural Resources



David A. Johnson  
Director

**COMMONWEALTH of VIRGINIA**  
**DEPARTMENT OF CONSERVATION AND RECREATION**

203 Governor Street  
Richmond, Virginia 23219-2010  
(804) 786-1712

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**AUG 01 2011**

**DEQ-Office of Environmental  
Impact Review**

**MEMORANDUM**

**DATE:** August 1, 2011  
**TO:** John E. Fisher, DEQ  
**FROM:** Roberta Rhur, Environmental Impact Review Coordinator  
**SUBJECT:** DEQ 11-130F, Commercial Wind Lease Issuance and Site Characteristics

**Division of Natural Heritage**

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has reviewed the Commercial Wind Lease Issuance & Site Characterization Activities on the Atlantic Outer Continental Shelf Offshore Consistency Determination document and would like to offer the following comments at this time:

As stated in the Critical Habitats and Hazard Areas (7:7E-3.38), the Roseate tern (*Sterna dougallii*, G4/S2B/S1N/LT/LT) and the Piping plover (*Charadrius melodus*, G3/S2B/S1N/LT/LT) may occur in the Atlantic OCS waters. DCR supports the use of the proposed mitigation measures including anti-perching devices, imposing lighting restrictions and prohibition of the use of guy wires to minimize and avoid impacts to these and other avian species within the VA Wind Energy Area (WEA).

In addition, the Environmental Assessment (EA) indicated sea turtles and marine mammals utilized the project area and may be impacted by various proposed activities including noise from seismic surveys, construction and decommissioning of towers as well as vessel collisions.

Due to the legal status of the above species, DCR recommends coordination with the Virginia Department of Game and Inland Fisheries (VDGIF), United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to ensure compliance with the protected species legislation. DCR also recommends the use of meteorological buoys as an alternative to traditional meteorological towers for collection of data due to the reduced installation time and overall potential environmental impact. Furthermore, DCR supports the development and implementation of an emergency spill plan as required by the United States Coast Guard (USCG) to avoid or minimize impacts to natural heritage resources including sensitive coastal areas from accidental diesel fuel spills and other contaminants.

The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

**Cc:** Ernie Aschenbach, VDGIF

**Tylan Dean, USFWS**  
**David O. Brien, NMFS**



## **Fisher, John (DEQ)**

---

**From:** Aschenbach, Ernie (DGIF)  
**Sent:** Wednesday, July 27, 2011 4:23 PM  
**To:** Fisher, John (DEQ)  
**Cc:** ProjectReview (DGIF)  
**Subject:** FW: ESSLog 32174 Federal Consistency Determination follow-up to review of ESSLog 31853; DGIF recommendations based on our review of the Draft Mid Atlantic Regional Wind Environmental Assessment (Draft EA)

We previously reviewed the Programmatic Environmental Impact Statement (PEIS) for this proposed action and reiterate our existing comments (attached).

The proposed action (ESSLog: 32174; Commercial Wind Lease Issuance & Associated Site Characterization Activities on the Outer Continental Shelf Offshore NJ, DE, MD, VA (DEQ-11-130F)) does not appear to propose activities that would not be consistent (e.g., does not appear to propose activities that would be inconsistent) with the Fisheries Enforceable Policy of the Coastal Zone Management Act. According to the information provided, this is a proposed lease sale and offshore site characterization activities allowable under terms of lease would including but not limited to installation of meteorological buoys or towers, shallow hazards survey, integrated geophysical/hydrographic surveys, high-resolution bathymetry. The use of TBT is not proposed. Therefore, we find the proposed action consistent with the Fisheries Enforceable Policy of the Coastal Zone Management Act.

Thank you.

Ernie Aschenbach  
Environmental Services Biologist  
Virginia Dept. of Game and Inland Fisheries  
4010 West Broad Street  
Richmond, VA 23230  
Phone: (804) 367-2733  
FAX: (804) 367-2427  
Email: [Ernie.Aschenbach@dgif.virginia.gov](mailto:Ernie.Aschenbach@dgif.virginia.gov)

---

**From:** Aschenbach, Ernie (DGIF) **On Behalf Of** ProjectReview (DGIF)  
**Sent:** Friday, May 20, 2011 12:19 PM  
**To:** Jurman, Ken (DMME); Christopher, Al (DMME)  
**Cc:** ProjectReview (DGIF)  
**Subject:** RE: ESSLog 31853; DGIF recommendations based on our review of the Draft Mid Atlantic Regional Wind Environmental Assessment (Draft EA)

We have reviewed the Programmatic Environmental Impact Statement (PEIS) and reiterate our existing recommendations, provided in response to the request for comments to the Draft EA.

Thank you for the opportunity to provide updated recommendations.

Ernie Aschenbach  
Environmental Services Biologist  
Virginia Dept. of Game and Inland Fisheries  
4010 West Broad Street  
Richmond, VA 23230  
Phone: (804) 367-2733  
FAX: (804) 367-2427  
Email: [Ernie.Aschenbach@dgif.virginia.gov](mailto:Ernie.Aschenbach@dgif.virginia.gov)

---

**From:** Jurman, Ken (DMME)  
**Sent:** Friday, April 22, 2011 12:36 PM  
**To:** ProjectReview (DGIF)  
**Cc:** Christopher, Al (DMME)  
**Subject:** RE: ESSLog 31853; DGIF recommendations based on our review of the Draft Mid Atlantic Regional Wind Environmental Assessment (Draft EA)

Thanks Ernie!

-Ken

---

**From:** Aschenbach, Ernie (DGIF) **On Behalf Of** ProjectReview (DGIF)  
**Sent:** Friday, April 22, 2011 12:34 PM  
**To:** Jurman, Ken (DMME)  
**Cc:** Boettcher, Ruth (DGIF); Fernald, Ray (DGIF); Reynolds, Rick (DGIF); ProjectReview (DGIF)  
**Subject:** ESSLog 31853; DGIF recommendations based on our review of the Draft Mid Atlantic Regional Wind Environmental Assessment (Draft EA)  
**Importance:** High

Ken Jurman  
Virginia Department of Mines, Minerals and Energy  
1100 Bank Street, 8th Floor  
Richmond, Virginia 23219  
(804) 692-3222

Hello!

Thank you for providing the Draft Mid Atlantic Regional Wind Environmental Assessment (Draft EA) for our review and comment. We have reviewed the Draft EA and offer the following recommendations:

- Biological Monitoring: We recommend the Final EA include (or require project-proponents provide) a detailed description of site-specific Biological Monitoring protocols. We recommend further coordination with federal and state resource agencies to develop and implement site-specific pre- and post-construction Biological Monitoring protocols. DGIF will provide further guidance, as appropriate.
- MET tower lighting specifications: We recommend the Final EA include a detailed description of proposed lighting specifications for MET towers. After reviewing this information, DGIF will provide further guidance, as appropriate.
- MET tower pre-construction acoustic monitoring equipment specifications: We recommend the Final EA specify that acoustic bat monitoring devices (e.g., Anabat detectors or other comparable remote bat detection devices) be deployed on all MET towers. Deploying multiple acoustic bat monitoring devices on a single MET tower, whenever practicable, could help improve data collection reliability in harsh marine environment. Use of acoustic bat monitoring devices will provide pre-construction data characterizing off-shore bat activity.
- MET tower post-construction monitoring and mitigation: We recommend the Final EA specify that one or more existing MET tower/s in areas where wind development occurs be left in place to provide post-construction monitoring data, based on site-specific monitoring protocols. Post-construction monitoring using existing equipment deployed on existing MET towers will provide data that could be used to evaluate potential changes in bat activity associated with climatic variables (e.g., wind, fronts, rain, etc.). Comparing pre- and post-construction acoustic monitoring data can be used to evaluate potential changes in bat activity associated with the turbines. All pre- and post-construction data collected from MET towers could be used to develop mitigation measures, as appropriate. After reviewing this information, DGIF will provide further guidance, as appropriate.
- MET tower decommissioning procedure: We recommend the Final EA specify decommissioning of a MET towers occur within 6 months (rather than within one year) after cancellation, expiration, relinquishment, or other

termination of the lease. We recommend using a MET tower design that would result in minimal impact and be removable without explosives, whenever practicable.

- Specifications of proposed High Resolution Geophysical (HRG) survey-equipment and Acoustic Doppler Current Profilers (ADCP): We recommend the Final EA include a detailed description of proposed HRG and ADCP survey equipment specifications and address potential impacts to marine mammals. After reviewing this information, DGIF will provide further guidance, as appropriate.

Thanks again for the opportunity to review this Draft EA and provide comments. Please call if you have further questions. DGIF welcomes this opportunity to provide further guidance, as appropriate.

Ernie Aschenbach  
Environmental Services Biologist  
Virginia Dept. of Game and Inland Fisheries  
4010 West Broad Street  
Richmond, VA 23230  
Phone: (804) 367-2733  
FAX: (804) 367-2427  
Email: [Ernie.Aschenbach@dgif.virginia.gov](mailto:Ernie.Aschenbach@dgif.virginia.gov)

## **Fisher, John (DEQ)**

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**From:** Forsgren, Diedre (VDH)  
**Sent:** Wednesday, July 20, 2011 4:11 PM  
**To:** Fisher, John (DEQ)  
**Cc:** Matthews, Barry (VDH)  
**Subject:** (11-130F) EA: Commercial Wind Lease Issuance & Site Characterization Activities on the Atlantic Outer Continental Shelf (Offshore NJ, DE, MD, and VA)

**DEQ Project #:** 11-130F  
**Name:** Commercial Wind Lease Issuance & Site Characterization Activities on the Atlantic Outer Continental Shelf (Offshore NJ, DE, MD, and VA)  
**Sponsor:** DOI/Bureau of Ocean Energy Management  
**Location:** (Hampton Roads and Accomack-Northampton Planning Districts)

VDH – Office of Drinking Water has reviewed DEQ Project Number 11-130F and has no comments.

Please see attached PDF from Division of Shellfish Sanitation of no comments.



(11-130F) Shellfish  
comments o...

### **Diedre Forsgren**

Office Services Specialist  
VIRGINIA DEPARTMENT OF HEALTH  
Office of Drinking Water, Room 622-A  
109 Governor Street  
Richmond, VA 23219  
Phone: (804) 864-7241  
email: [diedre.forsgren@vdh.virginia.gov](mailto:diedre.forsgren@vdh.virginia.gov)

**From:** [Skiles, Keith \(VDH\)](#)  
**To:** [Forsgren, Diedre \(VDH\)](#)  
**Subject:** RE: ?Shellfish comments on DEQ Review Request  
**Date:** Wednesday, July 20, 2011 3:37:25 PM

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No - I would not anticipate any public health implications from this activity related to shellfish.  
Keith

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**From:** Forsgren, Diedre (VDH)  
**Sent:** Wednesday, July 20, 2011 3:15 PM  
**To:** Skiles, Keith (VDH)  
**Subject:** FW: ?Shellfish comments on DEQ Review Request

Keith:

DEQ Project #: 11-130F  
Name: Commercial Wind Lease Issuance & Site Characterization Activities  
on the Atlantic Outer Continental Shelf Offshore  
Sponsor: Department of the Interior/Bureau of Ocean Energy Management  
Location: (Planning Districts for Hampton Roads and Accomack-Northampton)

I have received a review for this lease project.

Would you have any comment on this?

Thanks,

**Diedre Forsgren**

Office Services Specialist  
VIRGINIA DEPARTMENT OF HEALTH  
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109 Governor Street  
Richmond, VA 23219  
Phone: (804) 864-7241  
email: [diedre.forsgren@vdh.virginia.gov](mailto:diedre.forsgren@vdh.virginia.gov)



**Fisher, John (DEQ)**

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**From:** Kirchen, Roger (DHR)  
**Sent:** Thursday, July 28, 2011 4:32 PM  
**To:** Fisher, John (DEQ)  
**Subject:** BOEMRE Wind Lease (DEQ #11-130F: DHR FILE NO 2011-0551)

**DHR has been in direct consultation with BOEMRE regarding this project and will provide comments directly to BOEMRE pursuant Section 106 of the National Historic Preservation Act which requires federal agencies to consider the impacts of their projects on historic properties.**

**Roger**

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*Roger W. Kirchen, Archaeologist  
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